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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,694	07/15/2003	Sang-Hyun Doh	5000-1-335	7138

33942 7590 02/16/2007  
CHA & REITER, LLC  
210 ROUTE 4 EAST STE 103  
PARAMUS, NJ 07652

EXAMINER
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LEUNG, CHRISTINA Y

ART UNIT	PAPER NUMBER
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2613

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/619,694

Applicant(s)

DOH ET AL.

Examiner

Christina Y. Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 4 as currently amended recites “where N is an number of nodes *before* a new node has been added” in line 4 of the claim. However, Examiner respectfully notes that the method steps recited in claim 4 appears to be directed to the subject matter described on pages 26-27 of the specification (beginning from section “II-2 When the number of nodes is increased from an even number to an odd number”). Since the claim further recites in the next to last line of the claim “where N being an *odd* number,” it appears that the claim as currently amended now recites a situation wherein the number of nodes is increased from an odd number to an even number instead. However, the specification does not support a situation of increasing the number of nodes from an odd number to an even number wherein the particular steps recited in claim 4 are used.

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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4. Claims 1-4 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a 35 U.S.C. 101 judicial exception.

Claims 1-4 recite processes. However, although processes fall within at least one of the four enumerated categories of patentable subject matter, Applicant's claims are directed to abstract ideas that fall under a 35 U.S.C. 101 judicial exception. Claims directed to nothing more than abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature are not eligible for patent protection (MPEP 2106 IV. C.).

Examiner notes that claims that cover a *practical application* of a 35 U.S.C. 101 judicial exception may be patentable. A claimed invention is directed to a practical application of a 35 U.S.C. 101 judicial exception when it:

- (A) "transforms" an article or physical object to a different state or thing; or
- (B) otherwise produces a useful, concrete and tangible result (based on factors outlined in greater detail in MPEP 2106 IV. C. 2.).

However, although Applicant's claims recite "a method for assigning a predetermined wavelength between two different nodes in a wavelength division multiplexing ring communication network that has an N number of nodes and at least one pair of optical fibers sequentially connecting the N number of nodes" (to quote from claim 1; claim 4 is similar), Examiner respectfully notes the ring network, nodes, and fibers are recited only in the preamble of the claims. The process steps positively recited in the claims are only directed to creating and numerically manipulating an abstract matrix. Although the recited matrix contains values based on the ring network arrangement, the claims do not further recite a practical application of the recited matrix manipulation steps to transform an article or physical object to a different state or

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thing or to produce a real-world *result*. The “useful, concrete and tangible result” requirement requires that the claim must recite more than a 35 U.S.C. 101 judicial exception, in that the process claim must set forth a practical application of that judicial exception to produce a real-world result (MPEP 2106 IV. C. 2. b.).

***Response to Arguments***

5. Applicant’s arguments, see pages 6-8, filed 22 November 2006, with respect to Ellinas et al. (US 5,999,288) have been fully considered and are persuasive. The 35 U.S.C. 102 rejection of claims 1-4 has been withdrawn.

***Allowable Subject Matter***

6. Based on Applicant’s specification, Examiner notes that the claims could be amended by Applicant by further adding limitations to recite a claimed invention producing a useful, concrete and tangible result to overcome the 35 U.S.C. 101 rejections above. Examiner notes if claims 1-4 were amended by Applicant to overcome the 35 U.S.C. 101 rejection above (and amended to overcome the 35 U.S.C. 112 rejection of claim 4), they may contain allowable subject matter.

***Conclusion***

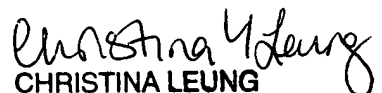
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Y. Leung whose telephone number is 571-272-3023. The examiner can normally be reached on Monday to Friday, 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
CHRISTINA LEUNG  
PRIMARY EXAMINER